

Please type a plus sign (+) inside this box → ☒

PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>	Attorney Docket No.	062020-1430
	First Inventor	Farrokh Ayazi
	Title	PIEZOELECTRIC ON SEMICONDUCTOR-ON- INSULATOR MICROELECTROMECHANICAL RESONATORS AND METHODS OF FABRICATION
	Express Mail Label No.	EV269335287US

APPLICATION ELEMENTS See MPEP Chapter 600 concerning utility patent application contents	ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
<input type="checkbox"/> APPLICANT REQUESTS EARLY PUBLICATION UNDER 37 CFR 1.219 (additional fee)	
1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing)	7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
2. <input checked="" type="checkbox"/> Applicant claims small entity status. See CFR 1.27	8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
3. <input checked="" type="checkbox"/> Specification (preferred arrangement set forth below) [Total Pages 22] <ul style="list-style-type: none">- Descriptive title of the invention- Cross Reference to Related Applications- Statement Regarding Fed. Sponsored R&D- Reference to sequence listing, a table, or a computer program listing appendix- Background of the Invention- Brief Summary of the Invention- Brief Description of the Drawings (if filed)- Detailed Description- Claim(s)- Abstract of the Disclosure	a. <input type="checkbox"/> Computer Readable Copy (CRF)
4. <input checked="" type="checkbox"/> Drawing(s) (35 USC 113) [Total Sheets 10]	b. Specification Sequence Listing on: <ul style="list-style-type: none">i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); orii. <input type="checkbox"/> Paper
5. Oath or Declaration [Total Pages 6] <ul style="list-style-type: none">a. <input checked="" type="checkbox"/> Newly Executed (original or copy)b. <input type="checkbox"/> Copy from a prior application (37 CFR §1.63(d)) (for continuation/divisional with Box 18 completed)i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).	c. <input type="checkbox"/> Statements verifying identity of above copies
6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76	
Assignee Name and Address (if applicable)	Georgia Tech Research Corporation 505 Tenth Street, NW, Atlanta, GA 30332-0415

ACCOMPANYING APPLICATION PARTS	
9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & Documents(s))	
10. <input type="checkbox"/> 37 CFR 3.73(b) Statement (when there is an assignee)	<input checked="" type="checkbox"/> Power of Attorney
11. <input type="checkbox"/> English Translation Document (if applicable)	
12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449	<input type="checkbox"/> Copies of IDS Citations
13. <input type="checkbox"/> Preliminary Amendment	
14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)	
15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)	
16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.	
17. <input type="checkbox"/> Other:	


18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: /

Prior application information: Examiner _____

Group / Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: the entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. This incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS			
<input checked="" type="checkbox"/> Customer Number or Bar Code Label		24504 (Insert Customer No. or Attach bar code label here)	
<input type="checkbox"/> Correspondence address below			
NAME	Scott A. Horstemeyer Thomas, Kayden, Horstemeyer & Risley, L.L.P.		
ADDRESS	100 Galleria Parkway Suite 1750		
CITY	Atlanta	STATE	Georgia
COUNTRY	U.S.A.	TELEPHONE	770-933-9500
		ZIP CODE	30339-5948
		FAX	770-951-0933
Name (Print/Type)	Scott A. Horstemeyer	Registration No. (Attorney/Agent)	34,183
Signature		Date	07/31/03

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

17707 U.S. PTO
07/31/03

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revisions.

☒ Applicant claims small entity status. See 37 CFR 1.27
TOTAL AMOUNT OF PAYMENT (\$)**559.00**

Complete If Known

Application Number	To be assigned
Filing Date	July 31, 2003
First Named Inventor	Farrokh Ayazi
Examiner Name	To be assigned
Group / Art Unit	To be assigned
Attorney Docket No.	062020-1430

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account

Deposit Account Number

20-0778

Deposit Account Name

Thomas, Kayden, Horstemeyer Risley, L.L.P.

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility Filing Fee	375.00
1002	330	2002	165	Design Filing Fee	
1003	520	2003	260	Plant Filing Fee	
1004	750	2004	375	Reissue Filing Fee	
1005	160	2005	80	Provisional Filing Fee	
SUBTOTAL (1)					(\$) 375.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

2. EXTRA CLAIMS FEE FOR SMALL PATENT CLAIMS				Extra Claims		Fee From Below	Fee Paid
Total Claims	36	- 20**=	16	X	9.00	=	144.00
Independent Claims	3	- 3**=	0	X	42.00	=	
Multiple Dependent					140.00	=	
Large Entity							
Fee Code	Fee (\$)	Small Entity		<u>Fee Description</u>			
		Fee Code	Fee (\$)				
1202	18	2202	9	Claims in excess of 20			
1201	84	2201	42	Independent claims in excess of 3			
1203	280	2203	140	Multiple dependent claim, if not paid			
1204	84	2204	42	**Reissue independent claims over original patent			
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent			
				SUBTOTAL (2)		(\$) 144.00	

**or number previously paid, if greater; For Reissues, see above

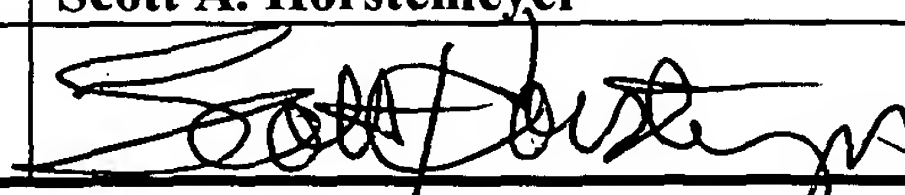
FEES CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge-late filing fee or oath	
1052	50	2052	25	Surcharge-late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive-unavoidable	
1453	1,300	2453	650	Petition to revive-unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee for provisional application	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	750	2810	375	For each add. invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited exam. of a design application	
Other fee (specify)					
SUBTOTAL (3)					(\$) 40.00

*Reduced by Basic Filing Fee Paid

SUBMITTED BY

Typed or Printed Name	Scott A. Horstemeyer	Registration No.	34,183	Telephone Number	770-933-9500
Signature		Date	07/31/03		

WARNING: Information on this form may become public. Credit Card Information should not be included on this form. Provide credit card information and authorization on PTO-2038

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 37 USC 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: **Ayazi, et al.**For: **PIEZOELECTRIC ON SEMICONDUCTOR-ON-INSULATOR
MICROELECTROMECHANICAL RESONATORS AND METHODS OF
FABRICATION****CERTIFICATE OF EXPRESS MAIL**Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

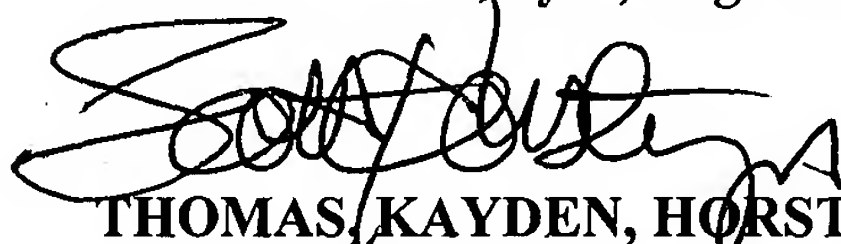
Enclosed for filing in the above case are the following documents:

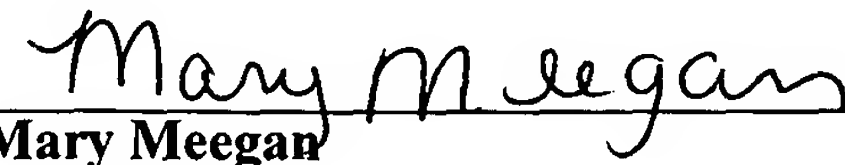
Return Postcard
Utility Patent Application Transmittal Page
Fee Transmittal Page
Utility Patent Application Consisting Of:
16 Pages of Specification
5 Pages of Claims (Claims 1-36)
1 Page of Abstract
10 Pages of Formal Drawings (Figs. 1-6)
Assignment/Assignment Cover Sheet (in duplicate)
Declaration and Power of Attorney (executed)

Further, the Commissioner is authorized to charge Deposit Account No. 20-0778 for any additional fees required. The Commissioner is requested to credit any excess fee paid to Deposit Account No. 20-0778.

Respectfully submitted,

Scott A. Horstemeyer, Reg. No. 34,183

**THOMAS KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**100 Galleria Parkway, N.W.
Suite 1750
Atlanta, Georgia 30339-5948Our Docket No: **062020-1430**

I hereby certify that all correspondence listed above are being deposited for delivery to the above addressee, with the United States Postal Service "**EXPRESS MAIL POST OFFICE TO ADDRESSEE**" service under 37 CFR §1.10 on the date indicated below:The envelope has been given U.S. Postal Service "Express Mail Post Office To Addressee" Package # **EV269335287US**.Date: 7-31-03
Mary Meegan